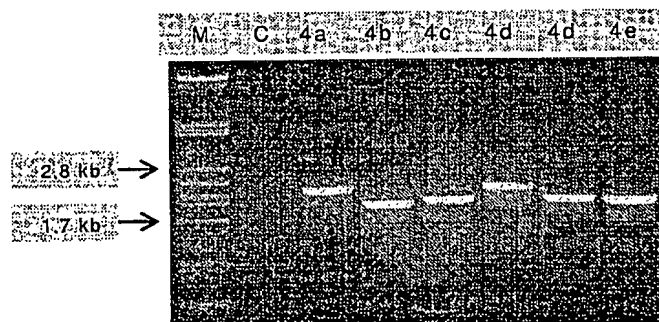
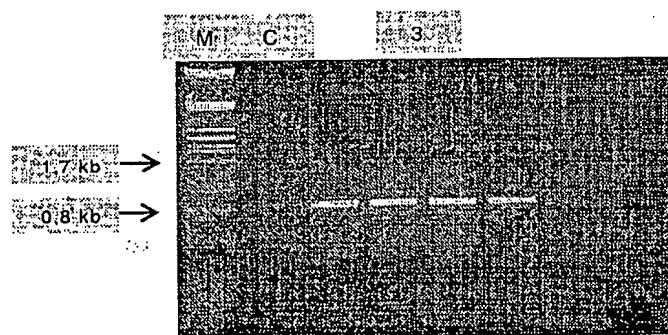
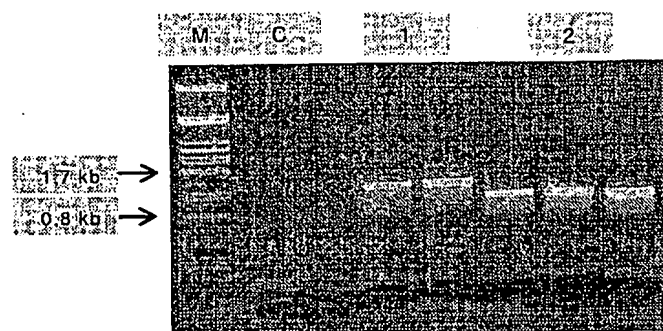


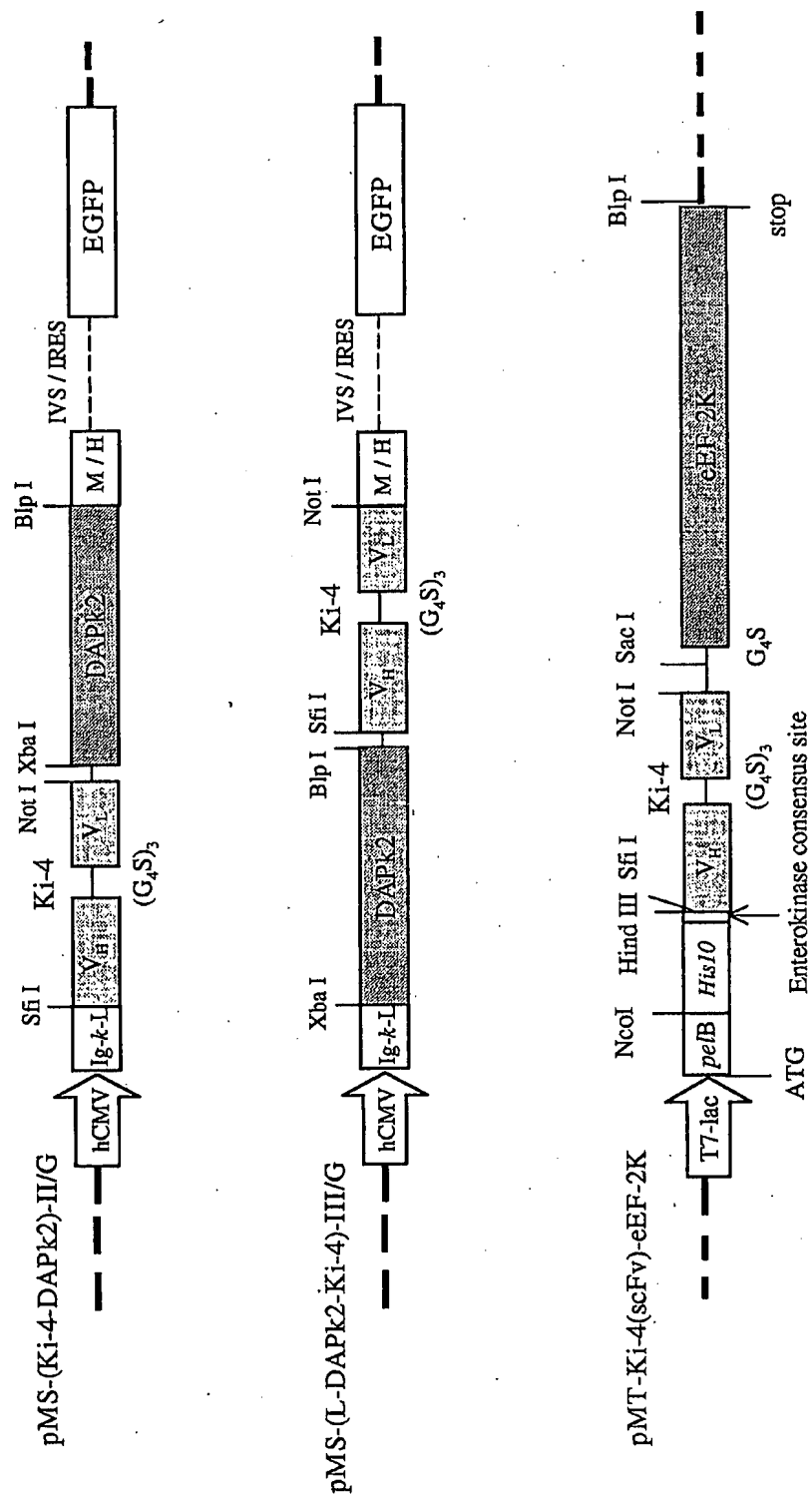
- 1 / 22 -

Fig. 1



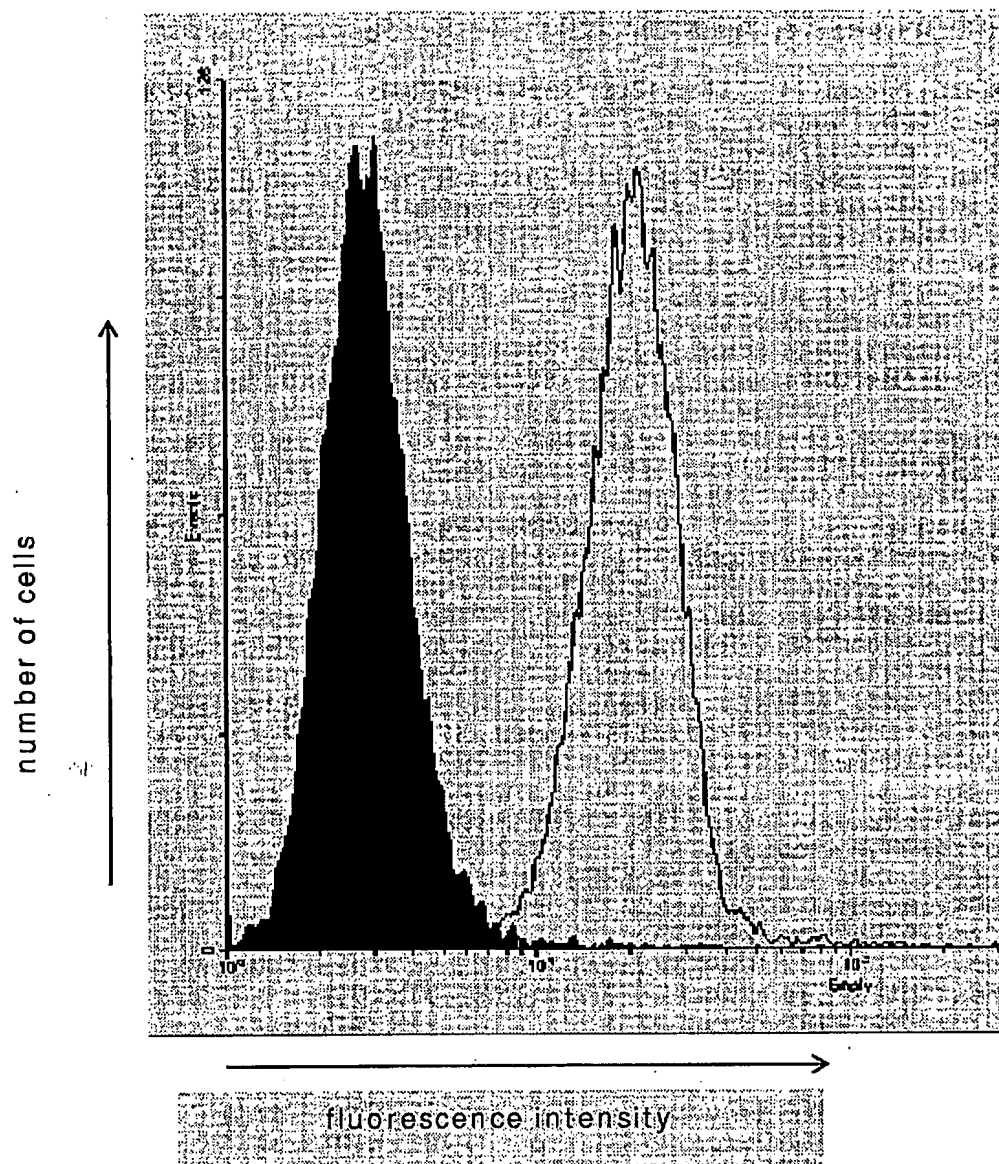
-2/22-

Fig.2



-3/ 22-

Fig.3



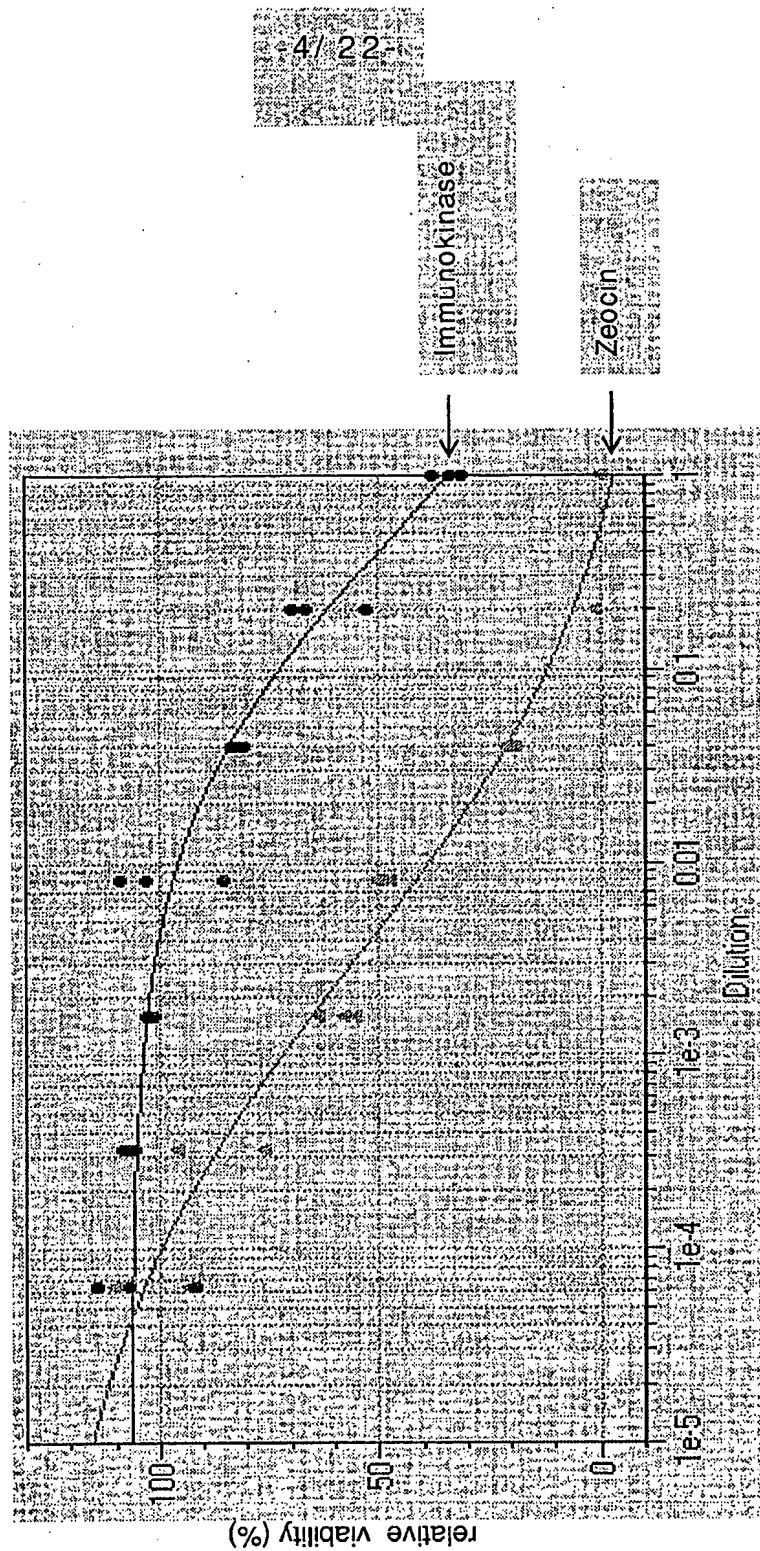


Fig. 4

-5/ 22-

Fig. 5

atg gag aca gac aca ctc ctg cta tgg gta ctg ctg ctc tgg gtt cca	48
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro	
1 5 10 15	
ggt tcc act ggt gac tct aga atg gtc cag gcc tcg atg agg agc cca	96
Gly Ser Thr Gly Asp Ser Arg Met Val Gln Ala Ser Met Arg Ser Pro	
20 25 30	
aat atg gag acg ttc aaa cag cag aag gtg gag gac ttt tat gat att	144
Asn Met Glu Thr Phe Lys Gln Gln Lys Val Glu Asp Phe Tyr Asp Ile	
35 40 45	
gga gag gag ctg ggc agt ggc cag ttt gcc atc gtg aag aag tgc cgg	192
Gly Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Lys Lys Cys Arg	
50 55 60	
gag aag agc acg ggg ctg gag tat gca gcc aag ttc att aag aag agg	240
Glu Lys Ser Thr Gly Leu Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg	
65 70 75 80	
cag agc cgg gcc agc cgt cgg ggc gtg tgc cgg gag gaa atc gag cgg	288
Gln Ser Arg Ala Ser Arg Arg Gly Val Cys Arg Glu Glu Ile Glu Arg	
85 90 95	
gag gtg agc atc ctg cgg cag gtg ctg cac ccc aac atc atc acg ctg	336
Glu Val Ser Ile Leu Arg Gln Val Leu His Pro Asn Ile Ile Thr Leu	
100 105 110	
cac gac gtc tat gag aac cgc acc gac gtg gtg ctc atc ctt gag cta	384
His Asp Val Tyr Glu Asn Arg Thr Asp Val Val Leu Ile Leu Glu Leu	
115 120 125	
gtg tcc gga gga gaa ctg ttt gat ttc ctg gcc cag aag gag tcg tta	432
Val Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Gln Lys Glu Ser Leu	
130 135 140	
agt gag gag gaa gcc acc agc ttc att aag cag atc ctg gat ggg gtg	480
Ser Glu Glu Glu Ala Thr Ser Phe Ile Lys Gln Ile Leu Asp Gly Val	
145 150 155 160	
aat tac ctt cac aca aag aaa att gct cac ttt gat ctc aag cca gaa	528
Asn Tyr Leu His Thr Lys Lys Ile Ala His Phe Asp Leu Lys Pro Glu	
165 170 175	
aac atc atg ttg tta gac aag aat atc cca att cca cac atc aag ctg	576
Asn Ile Met Leu Leu Asp Lys Asn Ile Pro Ile Pro His Ile Lys Leu	
180 185 190	
att gac ttt ggc ctg gct cac gaa ata gaa gat gga gtt gaa ttt aaa	624
Ile Asp Phe Gly Leu Ala His Glu Ile Glu Asp Gly Val Glu Phe Lys	
195 200 205	
aac att ttt ggg aca cct gaa ttt gtt gct cca gaa atc gtg aac tat	672
Asn Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr	
210 215 220	
gag cca ctg gga ctg gag gcc gac atg tgg agc att gga gtc atc acc	720
Glu Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr	
225 230 235 240	

-6/22-

tat atc ctt cta agt gga gcg tcc ccc ttc ctg gga gac aca aaa caa	768
Tyr Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Asp Thr Lys Gln	
245 250 255	
gaa acc ctg gca aat atc act gct gtg agt tac gac ttt gat gag gaa	816
Glu Thr Leu Ala Asn Ile Thr Ala Val Ser Tyr Asp Phe Asp Glu Glu	
260 265 270	
ttc ttc agc cag aca agc gag ctg gcc aag gac ttc att cgg aag ctt	864
Phe Phe Ser Gln Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Lys Leu	
275 280 285	
ctt gtg aaa gag acc cgg aaa cgg ctt acc atc caa gag gct ctc aga	912
Leu Val Lys Glu Thr Arg Lys Arg Leu Thr Ile Gln Glu Ala Leu Arg	
290 295 300	
cat ccc tgg atc gga tcc aaa cta gct gag cac gaa ggt gac gcg gcc	960
His Pro Trp Ile Gly Ser Lys Leu Ala Glu His Glu Gly Asp Ala Ala	
305 310 315 320	
cag ccg gcc atg gcc cag gtc aag ctg cag gag tca ggg act gaa ctg	1008
Gln Pro Ala Met Ala Gln Val Lys Leu Gln Glu Ser Gly Thr Glu Leu	
325 330 335	
gca aag cct ggg gcc gca gtg aag atg tcc tgc aag gct tct ggc tac	1056
Ala Lys Pro Gly Ala Ala Val Lys Met Ser Cys Lys Ala Ser Gly Tyr	
340 345 350	
acc ttt act gac tac tgg atg cac tgg gtt aaa cag agg cct gga cag	1104
Thr Phe Thr Asp Tyr Trp Met His Trp Val Lys Gln Arg Pro Gly Gln	
355 360 365	
ggt ctg gaa tgg att gga tac att aat cct aac act gct tat act gac	1152
Gly Leu Glu Trp Ile Gly Tyr Ile Asn Pro Asn Thr Ala Tyr Thr Asp	
370 375 380	
tac aat cag aaa ttc aag gac aag gcc aca ttg act gca gac aaa tcc	1200
Tyr Asn Gln Lys Phe Lys Asp Lys Ala Thr Leu Thr Ala Asp Lys Ser	
385 390 395 400	
tcc agc aca gcc tac atg caa ctg cgc agc ctg acc tct gag gat tct	1248
Ser Ser Thr Ala Tyr Met Gln Leu Arg Ser Leu Thr Ser Glu Asp Ser	
405 410 415	
gca gtc tat tac tgt gca aaa aag aca act cag act acg tgg ggg ttt	1296
Ala Val Tyr Tyr Cys Ala Lys Lys Thr Thr Gln Thr Thr Trp Gly Phe	
420 425 430	
cct ttt tgg ggc caa ggg acc acg gtc acc gtc tcc tca ggt gga ggc	1344
Pro Phe Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly	
435 440 445	
ggt tca ggc gga ggt ggc tct ggc ggt ggc gga tgc gac att gtg ctg	1392
Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu	
450 455 460	
acc cag tct cca aaa tcc atg gcc atg tca gtc gga gag agg gtc acc	1440
Thr Gln Ser Pro Lys Ser Met Ala Met Ser Val Gly Glu Arg Val Thr	
465 470 475 480	

-7/22-

ttg agc tgc aag gcc agt gag aat gtg gat tct ttt gtt tcc tgg tat	1488
Leu Ser Cys Lys Ala Ser Glu Asn Val Asp Ser Phe Val Ser Trp Tyr	
485 490 495	
caa cag aaa cca gcc cag tct cct aaa ctg ctg ata tac ggg gcc tcc	1536
Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Gly Ala Ser	
500 505 510	
aac cgg tac act ggg gtc ccc gat cgc ttc gca gcc agt gga tct gga	1584
Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Ala Gly Ser Gly Ser Gly	
515 520 525	
aga gat ttc act ctg acc atc agc agt gtg cag gct gaa gac ctt gca	1632
Arg Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala	
530 535 540	
gat tat cac tgt gga cag aat tac agg tat ccg ctc acg ttc ggt gct	1680
Asp Tyr His Cys Gly Gln Asn Tyr Arg Tyr Pro Leu Thr Phe Gly Ala	
545 550 555 560	
ggc acc aag ctg gaa atc aaa cgg gcg gcc gca ggg ccc gaa caa aaa	1728
Gly Thr Lys Leu Glu Ile Lys Arg Ala Ala Gly Pro Glu Gln Lys	
565 570 575	
ctc atc tca gaa gag gat ctg aat agc gcc gtc gac cat cat cat cat	1776
Leu Ile Ser Glu Glu Asp Leu Asn Ser Ala Val Asp His His His His	
580 585 590	
cat cat tga	1785
His His	
595	

-8/22-

Fig. 6

Met	Glu	Thr	Asp	Thr	Leu	Leu	Leu	Trp	Val	Leu	Leu	Leu	Trp	Val	Pro
1				5					10					15	
Gly	Ser	Thr	Gly	Asp	Ser	Arg	Met	Val	Gln	Ala	Ser	Met	Arg	Ser	Pro
			20					25					30		
Asn	Met	Glu	Thr	Phe	Lys	Gln	Gln	Lys	Val	Glu	Asp	Phe	Tyr	Asp	Ile
		35				40						45			
Gly	Glu	Glu	Leu	Gly	Ser	Gly	Gln	Phe	Ala	Ile	Val	Lys	Lys	Cys	Arg
	50					55					60				
Glu	Lys	Ser	Thr	Gly	Leu	Glu	Tyr	Ala	Ala	Lys	Phe	Ile	Lys	Lys	Arg
65				70						75					80
Gln	Ser	Arg	Ala	Ser	Arg	Arg	Gly	Val	Cys	Arg	Glu	Glu	Ile	Glu	Arg
			85					90						95	
Glu	Val	Ser	Ile	Leu	Arg	Gln	Val	Leu	His	Pro	Asn	Ile	Ile	Thr	Leu
			100				105						110		
His	Asp	Val	Tyr	Glu	Asn	Arg	Thr	Asp	Val	Val	Leu	Ile	Leu	Glu	Leu
	115					120						125			
Val	Ser	Gly	Gly	Glu	Leu	Phe	Asp	Phe	Leu	Ala	Gln	Lys	Glu	Ser	Leu
	130				135						140				
Ser	Glu	Glu	Glu	Ala	Thr	Ser	Phe	Ile	Lys	Gln	Ile	Leu	Asp	Gly	Val
145				150					155						160
Asn	Tyr	Leu	His	Thr	Lys	Lys	Ile	Ala	His	Phe	Asp	Leu	Lys	Pro	Glu
			165				170						175		
Asn	Ile	Met	Leu	Leu	Asp	Lys	Asn	Ile	Pro	Ile	Pro	His	Ile	Lys	Leu
		180					185						190		
Ile	Asp	Phe	Gly	Leu	Ala	His	Glu	Ile	Glu	Asp	Gly	Val	Glu	Phe	Lys
	195					200						205			
Asn	Ile	Phe	Gly	Thr	Pro	Glu	Phe	Val	Ala	Pro	Glu	Ile	Val	Asn	Tyr
	210				215						220				
Glu	Pro	Leu	Gly	Leu	Glu	Ala	Asp	Met	Trp	Ser	Ile	Gly	Val	Ile	Thr
225				230					235						240
Tyr	Ile	Leu	Leu	Ser	Gly	Ala	Ser	Pro	Phe	Leu	Gly	Asp	Thr	Lys	Gln
			245						250					255	
Glu	Thr	Leu	Ala	Asn	Ile	Thr	Ala	Val	Ser	Tyr	Asp	Phe	Asp	Glu	Glu
		260					265						270		
Phe	Phe	Ser	Gln	Thr	Ser	Glu	Leu	Ala	Lys	Asp	Phe	Ile	Arg	Lys	Leu
	275						280					285			
Leu	Val	Lys	Glu	Thr	Arg	Lys	Arg	Leu	Thr	Ile	Gln	Glu	Ala	Leu	Arg
	290				295						300				
His	Pro	Trp	Ile	Gly	Ser	Lys	Leu	Ala	Glu	His	Glu	Gly	Asp	Ala	Ala
305				310					315						320
Gln	Pro	Ala	Met	Ala	Gln	Val	Lys	Leu	Gln	Glu	Ser	Gly	Thr	Glu	Leu
			325						330					335	
Ala	Lys	Pro	Gly	Ala	Ala	Val	Lys	Met	Ser	Cys	Lys	Ala	Ser	Gly	Tyr
		340					345					350			
Thr	Phe	Thr	Asp	Tyr	Trp	Met	His	Trp	Val	Lys	Gln	Arg	Pro	Gly	Gln
	355					360						365			
Gly	Leu	Glu	Trp	Ile	Gly	Tyr	Ile	Asn	Pro	Asn	Thr	Ala	Tyr	Thr	Asp
	370				375					380					
Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Lys	Ala	Thr	Leu	Thr	Ala	Asp	Lys	Ser
385				390					395						400
Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu	Arg	Ser	Leu	Thr	Ser	Glu	Asp	Ser
			405					410					415		
Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Lys	Thr	Thr	Gln	Thr	Thr	Trp	Gly	Phe
		420					425						430		
Pro	Phe	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly
	435						440					445			
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Val	Leu
	450					455					460				



[illegible]

-10/22-

Fig. 7

atg gag aca gac aca ctc ctg cta tgg gta ctg ctg ctc tgg gtt cca	48
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro	
1 5 10 15	
ggt tcc act ggt gac gcg gcc cag ccg gcc atg gcc cag gtc aag ctg	96
Gly Ser Thr Gly Asp Ala Ala Gln Pro Ala Met Ala Gln Val Lys Leu	
20 25 30	
cag gag tca ggg act gaa ctg gca aag cct ggg gcc gca gtg aag atg	144
Gln Glu Ser Gly Thr Glu Leu Ala Lys Pro Gly Ala Ala Val Lys Met	
35 40 45	
tcc tgc aag gct tct ggc tac acc ttt act gac tac tgg atg cac tgg	192
Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr Trp Met His Trp	
50 55 60	
gtt aaa cag agg cct gga cag ggt ctg gaa tgg att gga tac att aat	240
Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly Tyr Ile Asn	
65 70 75 80	
cct aac act gct tat act gac tac aat cag aaa ttc aag gac aag gcc	288
Pro Asn Thr Ala Tyr Thr Asp Tyr Asn Gln Lys Phe Lys Asp Lys Ala	
85 90 95	
aca ttg act gca gac aaa tcc tcc agc aca gcc tac atg caa ctg cgc	336
Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr Met Gln Leu Arg	
100 105 110	
agc ctg acc tct gag gat tct gca gtc tat tac tgt gca aaa aag aca	384
Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys Ala Lys Lys Thr	
115 120 125	
act cag act acg tgg ggg ttt cct ttt tgg ggc caa ggg acc acg gtc	432
Thr Gln Thr Thr Trp Gly Phe Pro Phe Trp Gly Gln Gly Thr Thr Val	
130 135 140	
acc gtc tcc tca ggt gga ggc ggt tca ggc gga ggt ggc tct ggc ggt	480
Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly	
145 150 155 160	
ggc gga tcg gac att gtg ctg acc cag tct cca aaa tcc atg gcc atg	528
Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Lys Ser Met Ala Met	
165 170 175	
tca gtc gga gag agg gtc acc ttg agc tgc aag gcc agt gag aat gtg	576
Ser Val Gly Glu Arg Val Thr Leu Ser Cys Lys Ala Ser Glu Asn Val	
180 185 190	
gat tct ttt gtt tcc tgg tat caa cag aaa cca ggc cag tct cct aaa	624
Asp Ser Phe Val Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys	
195 200 205	
ctg ctg ata tac ggg gcc tcc aac cgg tac act ggg gtc ccc gat cgc	672
Leu Leu Ile Tyr Gly Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg	
210 215 220	
ttc gca ggc agt gga tct gga aga gat ttc act ctg acc atc agc agt	720
Phe Ala Gly Ser Gly Ser Gly Arg Asp Phe Thr Leu Thr Ile Ser Ser	
225 230 235 240	

-11/22-

gtg cag gct gaa gac ctt gca gat tat cac tgt gga cag aat tac agg	768
Val Gln Ala Glu Asp Leu Ala Asp Tyr His Cys Gly Gln Asn Tyr Arg	
245 250 255	
tat ccg ctc acg ttc ggt gct ggc acc aag ctg gaa atc aaa cgg gcg	816
Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys Arg Ala	
260 265 270	
gcc gca ctc gag tct aga atg gtc cag gcc tcg atg agg agc cca aat	864
Ala Ala Leu Glu Ser Arg Met Val Gln Ala Ser Met Arg Ser Pro Asn	
275 280 285	
atg gag acg ttc aaa cag cag aag gtg gag gac ttt tat gat att gga	912
Met Glu Thr Phe Lys Gln Gln Lys Val Glu Asp Phe Tyr Asp Ile Gly	
290 295 300	
gag gag ctg ggc agt ggc cag ttt gcc atc gtg aag aag tgc cgg gag	960
Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Lys Lys Cys Arg Glu	
305 310 315 320	
aag agc acg ggg ctg gag tat gca gcc aag ttc att aag aag agg cag	1008
Lys Ser Thr Gly Leu Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Gln	
325 330 335	
agc cgg gcc agc cgt cgg ggc gtg tgc cgg gag gaa atc gag cgg gag	1056
Ser Arg Ala Ser Arg Arg Gly Val Cys Arg Glu Glu Ile Glu Arg Glu	
340 345 350	
gtg agc atc ctg cgg cag gtg ctg cac ccc aac atc atc acg ctg cac	1104
Val Ser Ile Leu Arg Gln Val Leu His Pro Asn Ile Ile Thr Leu His	
355 360 365	
gac ctc tat gag aac cgc acc gac gtg gtg ctc atc ctt gag cta gtg	1152
Asp Leu Tyr Glu Asn Arg Thr Asp Val Val Leu Ile Leu Glu Leu Val	
370 375 380	
tcc gga gga gaa ctg ttt gat ttc ctg gcc cag aag gag tcg tta agt	1200
Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Gln Lys Glu Ser Leu Ser	
385 390 395 400	
gag gag gaa gcc acc agc ttc att aag cag atc ctg gat ggg gtg aat	1248
Glu Glu Glu Ala Thr Ser Phe Ile Lys Gln Ile Leu Asp Gly Val Asn	
405 410 415	
tac ctt cac aca aag aaa att gct cac ttt gat ctc aag cca gaa aac	1296
Tyr Leu His Thr Lys Lys Ile Ala His Phe Asp Leu Lys Pro Glu Asn	
420 425 430	
atc atg ttg tta gac aag aat atc cca att cca cac atc aag ctg att	1344
Ile Met Leu Leu Asp Lys Asn Ile Pro Ile Pro His Ile Lys Leu Ile	
435 440 445	
gac ttt ggc ctg gct cac gaa ata gaa gat gga gtt gaa ttt aaa aac	1392
Asp Phe Gly Leu Ala His Glu Ile Glu Asp Gly Val Glu Phe Lys Asn	
450 455 460	
att ttt ggg aca cct gaa ttt gtt gct cca gaa atc gtg aac tat gag	1440
Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu	
465 470 475 480	

-12/22-

cca ctg gga ctg gag gcc gac atg tgg agc att gga gtc atc acc tat	1488
Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr	
485 490 495	
atc ctt cta agt gga gcg tcc ccc ttc ctg gga gac aca aaa caa gaa	1536
Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Asp Thr Lys Gln Glu	
500 505 510	
acc ctg gca aat atc act gct gtg agt tac gac ttt gat gag gaa ttc	1584
Thr Leu Ala Asn Ile Thr Ala Val Ser Tyr Asp Phe Asp Glu Glu Phe	
515 520 525	
ttc agc cag aca agc gag ctg gcc aag gac ttc att cgg aag ctt ctt	1632
Phe Ser Gln Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Lys Leu Leu	
530 535 540	
gtg aaa gag acc cgg aaa cgg ctt acc atc caa gag gct ctc aga cat	1680
Val Lys Glu Thr Arg Lys Arg Leu Thr Ile Gln Glu Ala Leu Arg His	
545 550 555 560	
ccc tgg atc gga tcc aaa cta gct gag cac gaa ttt cga gga ggg ccc	1728
Pro Trp Ile Gly Ser Lys Leu Ala Glu His Glu Phe Arg Gly Gly Pro	
565 570 575	
gaa caa aaa ctc atc tca gaa gag gat ctg aat agc gcc gtc gac cat	1776
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Ser Ala Val Asp His	
580 585 590	
cat cat cat cat cat tga	1794
His His His His His	
595	

-13/22-

Fig. 8

Met	Glu	Thr	Asp	Thr	Leu	Leu	Leu	Trp	Val	Leu	Leu	Leu	Trp	Val	Pro
1				5					10					15	
Gly	Ser	Thr	Gly	Asp	Ala	Ala	Gln	Pro	Ala	Met	Ala	Gln	Val	Lys	Leu
			20					25					30		
Gln	Glu	Ser	Gly	Thr	Glu	Leu	Ala	Lys	Pro	Gly	Ala	Ala	Val	Lys	Met
			35				40					45			
Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asp	Tyr	Trp	Met	His	Trp
	50					55				60					
Val	Lys	Gln	Arg	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile	Gly	Tyr	Ile	Asn
65					70					75					80
Pro	Asn	Thr	Ala	Tyr	Thr	Asp	Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Lys	Ala
				85					90					95	
Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu	Arg
			100					105					110		
Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Lys	Thr
		115					120					125			
Thr	Gln	Thr	Thr	Trp	Gly	Phe	Pro	Phe	Trp	Gly	Gln	Gly	Thr	Thr	Val
	130					135					140				
Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly
145					150					155					160
Gly	Gly	Ser	Asp	Ile	Val	Leu	Thr	Gln	Ser	Pro	Lys	Ser	Met	Ala	Met
				165					170					175	
Ser	Val	Gly	Glu	Arg	Val	Thr	Leu	Ser	Cys	Lys	Ala	Ser	Glu	Asn	Val
			180					185					190		
Asp	Ser	Phe	Val	Ser	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Lys
		195					200					205			
Leu	Leu	Ile	Tyr	Gly	Ala	Ser	Asn	Arg	Tyr	Thr	Gly	Val	Pro	Asp	Arg
	210					215					220				
Phe	Ala	Gly	Ser	Gly	Ser	Gly	Arg	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser
225					230					235					240
Val	Gln	Ala	Glu	Asp	Leu	Ala	Asp	Tyr	His	Cys	Gly	Gln	Asn	Tyr	Arg
				245					250					255	
Tyr	Pro	Leu	Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg	Ala
			260					265					270		
Ala	Ala	Leu	Glu	Ser	Arg	Met	Val	Gln	Ala	Ser	Met	Arg	Ser	Pro	Asn
		275					280					285			
Met	Glu	Thr	Phe	Lys	Gln	Gln	Lys	Val	Glu	Asp	Phe	Tyr	Asp	Ile	Gly
	290					295					300				
Glu	Glu	Leu	Gly	Ser	Gly	Gln	Phe	Ala	Ile	Val	Lys	Lys	Cys	Arg	Glu
					310					315					320
Lys	Ser	Thr	Gly	Leu	Glu	Tyr	Ala	Ala	Lys	Phe	Ile	Lys	Lys	Arg	Gln
				325					330					335	
Ser	Arg	Ala	Ser	Arg	Arg	Gly	Val	Cys	Arg	Glu	Glu	Ile	Glu	Arg	Glu
			340					345					350		
Val	Ser	Ile	Leu	Arg	Gln	Val	Leu	His	Pro	Asn	Ile	Ile	Thr	Leu	His
		355					360					365			
Asp	Leu	Tyr	Glu	Asn	Arg	Thr	Asp	Val	Val	Leu	Ile	Leu	Glu	Leu	Val
	370					375					380				
Ser	Gly	Gly	Glu	Leu	Phe	Asp	Phe	Leu	Ala	Gln	Lys	Glu	Ser	Leu	Ser
					390					395					400
Glu	Glu	Glu	Ala	Thr	Ser	Phe	Ile	Lys	Gln	Ile	Leu	Asp	Gly	Val	Asn
				405					410					415	
Tyr	Leu	His	Thr	Lys	Lys	Ile	Ala	His	Phe	Asp	Leu	Lys	Pro	Glu	Asn
			420					425					430		
Ile	Met	Leu	Leu	Asp	Lys	Asn	Ile	Pro	Ile	Pro	His	Ile	Lys	Leu	Ile
		435					440					445			
Asp	Phe	Gly	Leu	Ala	His	Glu	Ile	Glu	Asp	Gly	Val	Glu	Phe	Lys	Asn
	450					455					460				

[illegible]

-15/ 22-

Fig. 9

atg	aaa	tac	ctg	ctg	ccg	acc	gct	gct	gct	ggt	ctg	ctg	ctc	ctc	gct	48
Met	Lys	Tyr	Leu	Leu	Pro	Thr	Ala	Ala	Ala	Gly	Leu	Leu	Leu	Leu	Ala	
1				5					10					15		
gcc	cag	ccg	gcg	atg	gcc	atg	ggc	cat	cat	cat	cat	cat	cat	cat	cat	96
Ala	Gln	Pro	Ala	Met	Ala	Met	Gly	His	His	His	His	His	His	His	His	
			20					25					30			
cat	cac	agc	agc	ggc	cat	atc	gac	gac	gac	gac	aag	cat	atg	aag	ctt	144
His	His	Ser	Ser	Gly	His	Ile	Asp	Asp	Asp	Asp	Lys	His	Met	Lys	Leu	
		35					40					45				
atg	gcc	cag	ccg	gcc	atg	gcc	cag	gtc	aag	ctg	cag	gag	tca	ggg	act	192
Met	Ala	Gln	Pro	Ala	Met	Ala	Gln	Val	Lys	Leu	Gln	Glu	Ser	Gly	Thr	
	50					55					60					
gaa	ctg	gca	aag	cct	ggg	gcc	gca	gtg	aag	atg	tcc	tgc	aag	gct	tct	240
Glu	Leu	Ala	Lys	Pro	Gly	Ala	Ala	Val	Lys	Met	Ser	Cys	Lys	Ala	Ser	
65					70					75					80	
ggc	tac	acc	ttt	act	gac	tac	tgg	atg	cac	tgg	gtt	aaa	cag	agg	cct	288
Gly	Tyr	Thr	Phe	Thr	Asp	Tyr	Trp	Met	His	Trp	Val	Lys	Gln	Arg	Pro	
				85					90					95		
gga	cag	ggt	ctg	gaa	tgg	att	gga	tac	att	aat	cct	aac	act	gct	tat	336
Gly	Gln	Gly	Leu	Glu	Trp	Ile	Gly	Tyr	Ile	Asn	Pro	Asn	Thr	Ala	Tyr	
			100				105						110			
act	gac	tac	aat	cag	aaa	ttc	aag	gac	aag	gcc	aca	ttg	act	gca	gac	384
Thr	Asp	Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Lys	Ala	Thr	Leu	Thr	Ala	Asp	
		115					120					125				
aaa	tcc	tcc	agc	aca	gcc	tac	atg	caa	ctg	cgc	agc	ctg	acc	tct	gag	432
Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu	Arg	Ser	Leu	Thr	Ser	Glu	
	130					135					140					
gat	tct	gca	gtc	tat	tac	tgt	gca	aaa	aag	aca	act	cag	act	acg	tgg	480
Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Lys	Thr	Thr	Gln	Thr	Thr	Trp	
145					150					155					160	
ggg	ttt	cct	ttt	tgg	ggc	caa	ggg	acc	acg	gtc	acc	gtc	tcc	tca	ggg	528
Gly	Phe	Pro	Phe	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly	
				165					170					175		
gga	ggc	ggt	tca	ggc	gga	ggt	ggc	tct	ggc	ggt	ggc	gga	tgc	gac	att	576
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	
			180					185					190			
gtg	ctg	acc	cag	tct	cca	aaa	tcc	atg	gcc	atg	tca	gtc	gga	gag	agg	624
Val	Leu	Thr	Gln	Ser	Pro	Lys	Met	Ala	Met	Ser	Val	Gly	Glu	Arg		
			195				200					205				
gtc	acc	ttg	agc	tgc	aag	gcc	agt	gag	aat	gtg	gat	tct	ttt	gtt	tcc	672
Val	Thr	Leu	Ser	Cys	Lys	Ala	Ser	Glu	Asn	Val	Asp	Ser	Phe	Val	Ser	
	210					215					220					
tgg	tat	caa	cag	aaa	cca	ggc	cag	tct	cct	aaa	ctg	ctg	ata	tac	ggg	720
Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Tyr	Gly	
225					230					235					240	

-16/ 22-

gcc tcc aac cgg tac act ggg gtc ccc gat cgc ttc gca ggc agt gga	768
Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Ala Gly Ser Gly	
245 250 255	
tct gga aga gat ttc act ctg acc atc agc agt gtg cag gct gaa gac	816
Ser Gly Arg Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp	
260 265 270	
ctt gca gat tat cac tgt gga cag aat tac agg tat ccg ctc acg ttc	864
Leu Ala Asp Tyr His Cys Gly Gln Asn Tyr Arg Tyr Pro Leu Thr Phe	
275 280 285	
ggg gct ggc acc aag ctg gaa atc aaa cgg gcg gcc gca gag ctc ggc	912
Gly Ala Gly Thr Lys Leu Glu Ile Lys Arg Ala Ala Ala Glu Leu Gly	
290 295 300	
gga ggt ggc tct atg gca gac gaa gat ctc atc ttc cgc ctg gaa ggc	960
Gly Gly Gly Ser Met Ala Asp Glu Asp Leu Ile Phe Arg Leu Glu Gly	
305 310 315 320	
gtt gat ggc ggc cag tcc ccc cga gct ggc cat gat ggt gat tct gat	1008
Val Asp Gly Gly Gln Ser Pro Arg Ala Gly His Asp Gly Asp Ser Asp	
325 330 335	
ggg gac agc gac gat gag gaa ggt tac ttc atc tgc ccc atc acg gat	1056
Gly Asp Ser Asp Asp Glu Glu Gly Tyr Phe Ile Cys Pro Ile Thr Asp	
340 345 350	
gac cca agc tcg aac cag aat gtc aat tcc aag gtt aat aag tac tac	1104
Asp Pro Ser Ser Asn Gln Asn Val Asn Ser Lys Val Asn Lys Tyr Tyr	
355 360 365	
agc aac cta aca aaa agt gag cgg tat agc tcc agc ggg tcc ccg gca	1152
Ser Asn Leu Thr Lys Ser Glu Arg Tyr Ser Ser Ser Gly Ser Pro Ala	
370 375 380	
aac tcc ttc cac ttc aag gaa gcc tgg aag cac gca atc cag aag gcc	1200
Asn Ser Phe His Phe Lys Glu Ala Trp Lys His Ala Ile Gln Lys Ala	
385 390 395 400	
aag cac atg ccc gac ccc tgg gct gag ttc cac ctg gaa gat att gcc	1248
Lys His Met Pro Asp Pro Trp Ala Glu Phe His Leu Glu Asp Ile Ala	
405 410 415	
acc gaa cgt gct act cga cac agg tac aac gcc gtc acc ggg gaa tgg	1296
Thr Glu Arg Ala Thr Arg His Arg Tyr Asn Ala Val Thr Gly Glu Trp	
420 425 430	
ctg gat gat gaa gtt ctg atc aag atg gca tct cag ccc ttc ggc cga	1344
Leu Asp Asp Glu Val Leu Ile Lys Met Ala Ser Gln Pro Phe Gly Arg	
435 440 445	
gga gca atg agg gag tgc ttc cgg acg aag aag ctc tcc aac ttc ttg	1392
Gly Ala Met Arg Glu Cys Phe Arg Thr Lys Lys Leu Ser Asn Phe Leu	
450 455 460	
cat gcc cag cag tgg aag ggc gcc tcc aac tac gtg gcg aag cgc tac	1440
His Ala Gln Gln Trp Lys Gly Ala Ser Asn Tyr Val Ala Lys Arg Tyr	
465 470 475 480	



-17/22-

atc gag ccc gta gac cgg gat gtg tac ttt gag gac gtg cgt cta cag	1488
Ile Glu Pro Val Asp Arg Asp Val Tyr Phe Glu Asp Val Arg Leu Gln	
485 490 495	
atg gag gcc aag ctc tgg ggg gag gag tat aat cgg cac aag ccc ccc	1536
Met Glu Ala Lys Leu Trp Gly Glu Glu Tyr Asn Arg His Lys Pro Pro	
500 505 510	
aag cag gtg gac atc atg cag atg tgc atc atc gag ctg aag gac aga	1584
Lys Gln Val Asp Ile Met Gln Met Cys Ile Ile Glu Leu Lys Asp Arg	
515 520 525	
ccg ggc aag ccc ctc ttc cac ctg gag cac tac atc gag ggc aag tac	1632
Pro Gly Lys Pro Leu Phe His Leu Glu His Tyr Ile Glu Gly Lys Tyr	
530 535 540	
atc aag tac aac tcc aac tct ggc ttt gtc cgc gat gac aac atc cgc	1680
Ile Lys Tyr Asn Ser Asn Ser Gly Phe Val Arg Asp Asp Asn Ile Arg	
545 550 555 560	
ctg acg ccg cag gcc ttc agc cac ttc act ttt gag cgt tcc ggc cat	1728
Leu Thr Pro Gln Ala Phe Ser His Phe Thr Phe Glu Arg Ser Gly His	
565 570 575	
cag ctg ata gtg gtg gac atc cag gga gtt ggg gat ctc tac act gac	1776
Gln Leu Ile Val Val Asp Ile Gln Gly Val Gly Asp Leu Tyr Thr Asp	
580 585 590	
cca cag atc cac acg gag acg ggc act gac ttt gga gac ggc aac cta	1824
Pro Gln Ile His Thr Glu Thr Gly Thr Asp Phe Gly Asp Gly Asn Leu	
595 600 605	
ggt gtc cgc ggg atg gcg ctc ttc ttc tac tct cat gcc tgc aac cgg	1872
Gly Val Arg Gly Met Ala Leu Phe Phe Tyr Ser His Ala Cys Asn Arg	
610 615 620	
att tgc gag agc atg ggc ctt gct ccc ttt gac ctc tcg ccc cgg gag	1920
Ile Cys Glu Ser Met Gly Leu Ala Pro Phe Asp Leu Ser Pro Arg Glu	
625 630 635 640	
agg gat gca gtg aat cag aac acc aag ctg ctg caa tca gcc aag acc	1968
Arg Asp Ala Val Asn Gln Asn Thr Lys Leu Leu Gln Ser Ala Lys Thr	
645 650 655	
atc ttg aga gga aca gag gaa aaa tgt ggg agc ccc cga gta agg acc	2016
Ile Leu Arg Gly Thr Glu Glu Lys Cys Gly Ser Pro Arg Val Arg Thr	
660 665 670	
ctc tct ggg agc cgg cca ccc ctg ctc cgt ccc ctt tca gag aac tct	2064
Leu Ser Gly Ser Arg Pro Pro Leu Leu Arg Pro Leu Ser Glu Asn Ser	
675 680 685	
gga gac gag aac atg agc gac gtg acc ttc gac tct ctc cct tct tcc	2112
Gly Asp Glu Asn Met Ser Asp Val Thr Phe Asp Ser Leu Pro Ser Ser	
690 695 700	
cca tct tcg gcc aca cca cac agc cag aag cta gac cac ctc cat tgg	2160
Pro Ser Ser Ala Thr Pro His Ser Gln Lys Leu Asp His Leu His Trp	
705 710 715 720	

-18/22-

cca gtc ttc agt gac ctc gat aac atg gca tcc aga gac cat gat cat	2208
Pro Val Phe Ser Asp Leu Asp Asn Met Ala Ser Arg Asp His Asp His	
725 730 735	
cta gac aac cac cgg gag tct gag aat agt ggg gac agc gga tac ccc	2256
Leu Asp Asn His Arg Glu Ser Glu Asn Ser Gly Asp Ser Gly Tyr Pro	
740 745 750	
agt gag aag cgg ggt gag ctg gat gac cct gag ccc cga gaa cat ggc	2304
Ser Glu Lys Arg Gly Glu Leu Asp Asp Pro Glu Pro Arg Glu His Gly	
755 760 765	
cac tca tac agt aat cgg aag tac gag tct gac gaa gac agc ctg ggc	2352
His Ser Tyr Ser Asn Arg Lys Tyr Glu Ser Asp Glu Asp Ser Leu Gly	
770 775 780	
agc tct gga cgg gta tgt gta gag aag tgg aat ctc ctc aac tcc tcc	2400
Ser Ser Gly Arg Val Cys Val Glu Lys Trp Asn Leu Leu Asn Ser Ser	
785 790 795 800	
cgc ctc cac ctg ccg agg gct tcg gcc gtg gcc ctg gaa gtg caa agg	2448
Arg Leu His Leu Pro Arg Ala Ser Ala Val Ala Leu Glu Val Gln Arg	
805 810 815	
ctt aat gct ctg gac ctc gaa aag aaa atc ggg aag tcc att ttg ggg	2496
Leu Asn Ala Leu Asp Leu Glu Lys Lys Ile Gly Lys Ser Ile Leu Gly	
820 825 830	
aag gtc cat ctg gcc atg gtg cgc tac cac gag ggt ggg cgc ttc tgc	2544
Lys Val His Leu Ala Met Val Arg Tyr His Glu Gly Gly Arg Phe Cys	
835 840 845	
gag aag ggc gag gag tgg gac cag gag tcg gct gtc ttc cac ctg gag	2592
Glu Lys Gly Glu Glu Trp Asp Gln Glu Ser Ala Val Phe His Leu Glu	
850 855 860	
cac gca gcc aac ctg ggc gag ctg gag gcc atc gtg ggc ctg gga ctc	2640
His Ala Ala Asn Leu Gly Glu Leu Glu Ala Ile Val Gly Leu Gly Leu	
865 870 875 880	
atg tac tcg cag ttg cct cat cac atc cta gcc gat gtc tct ctg aag	2688
Met Tyr Ser Gln Leu Pro His His Ile Leu Ala Asp Val Ser Leu Lys	
885 890 895	
gag aca gaa gag aac aaa acc aaa gga ttt gat tac tta cta aag gcc	2736
Glu Thr Glu Glu Asn Lys Thr Lys Gly Phe Asp Tyr Leu Leu Lys Ala	
900 905 910	
gct gaa gct ggc gac agg cag tcc atg atc cta gtg gcg cga gct ttt	2784
Ala Glu Ala Gly Asp Arg Gln Ser Met Ile Leu Val Ala Arg Ala Phe	
915 920 925	
gac tct ggc cag aac ctc agc ccg gac agg tgc caa gac tgg cta gag	2832
Asp Ser Gly Gln Asn Leu Ser Pro Asp Arg Cys Gln Asp Trp Leu Glu	
930 935 940	
gcc ctg cac tgg tac aac act gcc ctg gag atg acg gac tgt gat gag	2880
Ala Leu His Trp Tyr Asn Thr Ala Leu Glu Met Thr Asp Cys Asp Glu	
945 950 955 960	

-19/ 22-

ggc ggt gag tac gac gga atg cag gac gag ccc cgg tac atg atg ctg 2928  
 Gly Gly Glu Tyr Asp Gly Met Gln Asp Glu Pro Arg Tyr Met Met Leu  
                   965                  970                  975

gcc agg gag gcc gag atg ctg ttc aca gga ggc tac ggg ctg gag aag 2976  
 Ala Arg Glu Ala Glu Met Leu Phe Thr Gly Gly Tyr Gly Leu Glu Lys  
                   980                  985                  990

gac ccg cag aga tca ggg gac ttg tat acc cag gca gca gag gca gcg 3024  
 Asp Pro Gln Arg Ser Gly Asp Leu Tyr Thr Gln Ala Ala Glu Ala Ala  
                   995                  1000                  1005

atg gaa gcc atg aag ggc cga ctg gcc aac cag tac tac caa aag gct 3072  
 Met Glu Ala Met Lys Gly Arg Leu Ala Asn Gln Tyr Tyr Gln Lys Ala  
           1010                  1015                  1020

gaa gag gcc tgg gcc cag atg gag gag taa 3102  
 Glu Glu Ala Trp Ala Gln Met Glu Glu  
 1025                  1030

-20/22-

Fig. 10

Met	Lys	Tyr	Leu	Leu	Pro	Thr	Ala	Ala	Ala	Gly	Leu	Leu	Leu	Leu	Ala
1				5					10					15	
Ala	Gln	Pro	Ala	Met	Ala	Met	Gly	His	His	His	His	His	His	His	His
		20					25						30		
His	His	Ser	Ser	Gly	His	Ile	Asp	Asp	Asp	Asp	Lys	His	Met	Lys	Leu
		35					40					45			
Met	Ala	Gln	Pro	Ala	Met	Ala	Gln	Val	Lys	Leu	Gln	Glu	Ser	Gly	Thr
		50				55					60				
Glu	Leu	Ala	Lys	Pro	Gly	Ala	Ala	Val	Lys	Met	Ser	Cys	Lys	Ala	Ser
		65			70					75					80
Gly	Tyr	Thr	Phe	Thr	Asp	Tyr	Trp	Met	His	Trp	Val	Lys	Gln	Arg	Pro
				85					90					95	
Gly	Gln	Gly	Leu	Glu	Trp	Ile	Gly	Tyr	Ile	Asn	Pro	Asn	Thr	Ala	Tyr
			100				105						110		
Thr	Asp	Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Lys	Ala	Thr	Leu	Thr	Ala	Asp
		115					120					125			
Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu	Arg	Ser	Leu	Thr	Ser	Glu
		130				135						140			
Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Lys	Thr	Thr	Gln	Thr	Thr	Trp
		145			150					155					160
Gly	Phe	Pro	Phe	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly
			165						170					175	
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile
			180				185						190		
Val	Leu	Thr	Gln	Ser	Pro	Lys	Ser	Met	Ala	Met	Ser	Val	Gly	Glu	Arg
		195					200					205			
Val	Thr	Leu	Ser	Cys	Lys	Ala	Ser	Glu	Asn	Val	Asp	Ser	Phe	Val	Ser
		210				215					220				
Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Tyr	Gly
		225			230					235					240
Ala	Ser	Asn	Arg	Tyr	Thr	Gly	Val	Pro	Asp	Arg	Phe	Ala	Gly	Ser	Gly
			245						250					255	
Ser	Gly	Arg	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Val	Gln	Ala	Glu	Asp
		260						265					270		
Leu	Ala	Asp	Tyr	His	Cys	Gly	Gln	Asn	Tyr	Arg	Tyr	Pro	Leu	Thr	Phe
		275					280					285			
Gly	Ala	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg	Ala	Ala	Ala	Glu	Leu	Gly
		290				295					300				
Gly	Gly	Gly	Ser	Met	Ala	Asp	Glu	Asp	Leu	Ile	Phe	Arg	Leu	Glu	Gly
		305			310					315					320
Val	Asp	Gly	Gly	Gln	Ser	Pro	Arg	Ala	Gly	His	Asp	Gly	Asp	Ser	Asp
			325						330					335	
Gly	Asp	Ser	Asp	Asp	Glu	Glu	Gly	Tyr	Phe	Ile	Cys	Pro	Ile	Thr	Asp
			340					345					350		
Asp	Pro	Ser	Ser	Asn	Gln	Asn	Val	Asn	Ser	Lys	Val	Asn	Lys	Tyr	Tyr
		355					360					365			
Ser	Asn	Leu	Thr	Lys	Ser	Glu	Arg	Tyr	Ser	Ser	Ser	Gly	Ser	Pro	Ala
		370				375						380			
Asn	Ser	Phe	His	Phe	Lys	Glu	Ala	Trp	Lys	His	Ala	Ile	Gln	Lys	Ala
		385			390					395					400
Lys	His	Met	Pro	Asp	Pro	Trp	Ala	Glu	Phe	His	Leu	Glu	Asp	Ile	Ala
			405						410					415	
Thr	Glu	Arg	Ala	Thr	Arg	His	Arg	Tyr	Asn	Ala	Val	Thr	Gly	Glu	Trp
		420						425					430		
Leu	Asp	Asp	Glu	Val	Leu	Ile	Lys	Met	Ala	Ser	Gln	Pro	Phe	Gly	Arg
		435					440					445			
Gly	Ala	Met	Arg	Glu	Cys	Phe	Arg	Thr	Lys	Lys	Leu	Ser	Asn	Phe	Leu
		450				455					460				
His	Ala	Gln	Gln	Trp	Lys	Gly	Ala	Ser	Asn	Tyr	Val	Ala	Lys	Arg	Tyr
		465			470					475					480

-21/22-

Ile	Glu	Pro	Val	Asp	Arg	Asp	Val	Tyr	Phe	Glu	Asp	Val	Arg	Leu	Gln	485	490	495
Met	Glu	Ala	Lys	Leu	Trp	Gly	Glu	Glu	Tyr	Asn	Arg	His	Lys	Pro	Pro	500	505	510
Lys	Gln	Val	Asp	Ile	Met	Gln	Met	Cys	Ile	Ile	Glu	Leu	Lys	Asp	Arg	515	520	525
Pro	Gly	Lys	Pro	Leu	Phe	His	Leu	Glu	His	Tyr	Ile	Glu	Gly	Lys	Tyr	530	535	540
Ile	Lys	Tyr	Asn	Ser	Asn	Ser	Gly	Phe	Val	Arg	Asp	Asp	Asn	Ile	Arg	545	550	555
Leu	Thr	Pro	Gln	Ala	Phe	Ser	His	Phe	Thr	Phe	Glu	Arg	Ser	Gly	His	565	570	575
Gln	Leu	Ile	Val	Val	Asp	Ile	Gln	Gly	Val	Gly	Asp	Leu	Tyr	Thr	Asp	580	585	590
Pro	Gln	Ile	His	Thr	Glu	Thr	Gly	Thr	Asp	Phe	Gly	Asp	Gly	Asn	Leu	595	600	605
Gly	Val	Arg	Gly	Met	Ala	Leu	Phe	Phe	Tyr	Ser	His	Ala	Cys	Asn	Arg	610	615	620
Ile	Cys	Glu	Ser	Met	Gly	Leu	Ala	Pro	Phe	Asp	Leu	Ser	Pro	Arg	Glu	625	630	635
Arg	Asp	Ala	Val	Asn	Gln	Asn	Thr	Lys	Leu	Leu	Gln	Ser	Ala	Lys	Thr	645	650	655
Ile	Leu	Arg	Gly	Thr	Glu	Glu	Lys	Cys	Gly	Ser	Pro	Arg	Val	Arg	Thr	660	665	670
Leu	Ser	Gly	Ser	Arg	Pro	Pro	Leu	Leu	Arg	Pro	Leu	Ser	Glu	Asn	Ser	675	680	685
Gly	Asp	Glu	Asn	Met	Ser	Asp	Val	Thr	Phe	Asp	Ser	Leu	Pro	Ser	Ser	690	695	700
Pro	Ser	Ser	Ala	Thr	Pro	His	Ser	Gln	Lys	Leu	Asp	His	Leu	His	Trp	705	710	715
Pro	Val	Phe	Ser	Asp	Leu	Asp	Asn	Met	Ala	Ser	Arg	Asp	His	Asp	His	725	730	735
Leu	Asp	Asn	His	Arg	Glu	Ser	Glu	Asn	Ser	Gly	Asp	Ser	Gly	Tyr	Pro	740	745	750
Ser	Glu	Lys	Arg	Gly	Glu	Leu	Asp	Asp	Pro	Glu	Pro	Arg	Glu	His	Gly	755	760	765
His	Ser	Tyr	Ser	Asn	Arg	Lys	Tyr	Glu	Ser	Asp	Glu	Asp	Ser	Leu	Gly	770	775	780
Ser	Ser	Gly	Arg	Val	Cys	Val	Glu	Lys	Trp	Asn	Leu	Leu	Asn	Ser	Ser	785	790	795
Arg	Leu	His	Leu	Pro	Arg	Ala	Ser	Ala	Val	Ala	Leu	Glu	Val	Gln	Arg	805	810	815
Leu	Asn	Ala	Leu	Asp	Leu	Glu	Lys	Lys	Ile	Gly	Lys	Ser	Ile	Leu	Gly	820	825	830
Lys	Val	His	Leu	Ala	Met	Val	Arg	Tyr	His	Glu	Gly	Gly	Arg	Phe	Cys	835	840	845
Glu	Lys	Gly	Glu	Glu	Trp	Asp	Gln	Glu	Ser	Ala	Val	Phe	His	Leu	Glu	850	855	860
His	Ala	Ala	Asn	Leu	Gly	Glu	Leu	Glu	Ala	Ile	Val	Gly	Leu	Gly	Leu	865	870	875
Met	Tyr	Ser	Gln	Leu	Pro	His	His	Ile	Leu	Ala	Asp	Val	Ser	Leu	Lys	885	890	895
Glu	Thr	Glu	Glu	Asn	Lys	Thr	Lys	Gly	Phe	Asp	Tyr	Leu	Leu	Lys	Ala	900	905	910
Ala	Glu	Ala	Gly	Asp	Arg	Gln	Ser	Met	Ile	Leu	Val	Ala	Arg	Ala	Phe	915	920	925
Asp	Ser	Gly	Gln	Asn	Leu	Ser	Pro	Asp	Arg	Cys	Gln	Asp	Trp	Leu	Glu	930	935	940
Ala	Leu	His	Trp	Tyr	Asn	Thr	Ala	Leu	Glu	Met	Thr	Asp	Cys	Asp	Glu	945	950	955

-22/ 22-

Gly Gly Glu Tyr Asp Gly Met Gln Asp Glu Pro Arg Tyr Met Met Leu  
                   965                  970                  975  
 Ala Arg Glu Ala Glu Met Leu Phe Thr Gly Gly Tyr Gly Leu Glu Lys  
                   980                  985                  990  
 Asp Pro Gln Arg Ser Gly Asp Leu Tyr Thr Gln Ala Ala Glu Ala Ala  
                   995                  1000                  1005  
 Met Glu Ala Met Lys Gly Arg Leu Ala Asn Gln Tyr Tyr Gln Lys Ala  
       1010                  1015                  1020  
 Glu Glu Ala Trp Ala Gln Met Glu Glu  
 1025                  1030

Fig. 11

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser

Fig. 12

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu

Fig. 13

Asp Xaa Trp Xaa Xaa Gly